REMARKS

Upon entry of the present amendment, claims 1-8 and 10-22 will be pending. Claims 20-22 have been added. Independent claims 1, 13, 14, 16, 17, and 19 have been amended to further clarify that that the superabrasive particles are effectively dispersed by the dispersant. Reconsideration of the application in view of the following remarks is respectfully requested.

I. Claims 1-4, 7, 8, 10-12, and 16-19 are Not Anticipated by Kendall et al.

a. U.S. Pat. No. 6,848,986; U.S. Pat. App. Pubs. 2003/0017797 and 2003/0194961

Claims 1-4, 7, 8, 10-12, and 16-19 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Kendall et al. (U.S. Pat. No. 6,848,986 and U.S. Pat. App. Pubs. 2003/0017797 and 2003/0194961; hereinafter referred to collectively as "Kendall et al. ('233)"). These three references are related and claim common priority to application number 09/819,233. Applicants request reconsideration of this rejection because Kendall et al. ('233) do not teach or suggest an abrasive slurry comprising superabrasive particles in combination with a dispersant having molecular weights or amine values wherein the dispersant is effective at having a majority of the superabrasive particles dispersed as individual particles as recited in Applicants' amended claims.

The Office Action alleges that because the list of abrasive particles reported by Kendall et al. ('233) includes diamonds and Example 1 reports Solsperes 32000, Kendall et al. ('233) "disclose embodiments meeting applicants' claimed limitations". Applicants' response filed October 17, 2005 addressed this issue. Applicants' prior arguments are not repeated herein, but continue to apply.

To further clarify the differences between the claimed invention and the teachings of Kendall et al. ('233), Applicants have amended claim 1 and added claims 20-22 to further clarify the efficacy of the dispersant and superabrasive particles combination in the abrasive slurry of the present claims. Kendall et al. ('233) do not teach or suggest such a combination, much less, the efficacy of the claimed dispersant in such a combination.

Claim 20, for example, recites that the abrasive slurry remains opaque for at least five minutes if sonicated for at least 25 seconds, as demonstrated, for example, in Examples 4-7. Claim 21 recites that the abrasive slurry does not settle to form a cake in less than 30 minutes if sonicated for at least 20 seconds, as demonstrated, for example, in Examples 8-13. Claim 22 recites that at least 78.4 percent of the particles in the particle size distribution of the abrasive slurry are less than 1.5 times the nominal size of the superabrasive particles, as demonstrated, for example, in Examples 8-13. Kendall et al. ('233) do not teach or suggest a dispersant and superabrasive particle combination that achieves these levels of efficacy.

As stated in Applicants' prior response, it is important to note that the selection of a suitable dispersant for a particular combination of particles and a continuous phase is not a trivial matter (see, e.g., Parfitt, G.D., "Fundamental Aspects of Dispersion" in *Dispersion of Powders in Liquids (with Special Reference to Pigments)* 3rd edition, ed. G.D. Parfitt (New Jersey: Applied Science Publishers, 1981), 1:1-50). "Surface active agents often play a leading role in all three aspects of the dispersion process, although they might easily be useful in one but antagonistic in another. There are no simple rules; each case has to be considered in detail." (*id.* at page 4).

In view of the complex issues involved in selecting a dispersant for a particular combination of abrasive particles and binder, one skilled in the art would recognize that Kendall et al. ('233) simply do not teach or suggest an abrasive slurry comprising superabrasive particles in combination with a dispersant having molecular weights or amine values wherein the dispersant is effective at having a majority of the superabrasive particles dispersed as individual particles as recited in Applicants' amended claims. Accordingly, the rejection of claims 1-4, 7, 8, 10-12, and 16-19 under 35 U.S.C. § 102(e) in view of Kendall et al. ('233) should be withdrawn.

b. U.S. Pat. App. Pub. 2003/0024169

Claims 1-4, 7, 8, 10-12, and 16-19 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Kendall et al. (U.S. Pat. App. Pub. 2003/0024169; hereinafter referred to as "Kendall et al. ('169)"). As discussed above, Applicants have amended the independent claims to further clarify the differences between the claimed invention and the references relied on by the Office Action. In view of the amendments in Applicants' prior remarks concerning this rejection, Applicants' request reconsideration of this rejection because Kendall et al. ('169) do

not teach or suggest an abrasive slurry comprising superabrasive particles in combination with a dispersant having molecular weights or amine values wherein the dispersant is effective at having a majority of the superabrasive particles dispersed as individual particles as recited in Applicants' amended claims. Accordingly, the rejection of claims 1-4, 7, 8, 10-12, and 16-19 under 35 U.S.C. § 102(e) in view of Kendall et al. ('169) should be withdrawn.

II. Claims 1-8 and 10-19 are Not Obvious in view of Bruxvoort et al., Yamamoto et al., Kamikubo et al., and Cayton et al.

Claims 1-8 and 10-19 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Bruxvoort et al. (U.S. Pat. No. 5,958,794) in view of Yamamoto et al. (U.S. Pat. No. 5,244,979), Kamikubo et al. (U.S. Pat. No. 5,698,618), and Cayton et al. (U.S. Pat. App. Pub. 2003/0032679). Without admitting that Cayton et al. is available as prior art to the present application, Applicants request reconsideration of this rejection because there is no evidence of record indicating that those of ordinary skill would have been properly motivated to combine one of the dispersants reported by Yamamoto et al., Cayton et al., or Kamikubo et al. into a dispersion taught by Bruxvoort et al., much less a dispersion comprising superabrasives.

Applicants' response filed October 17, 2005 addressed this issue. Applicants' prior arguments are not repeated herein, but continue to apply. In response to Applicants' prior arguments, the present Office Action states:

> The Examiner agrees that the *optimal* dispersant for a particular combination of particles and continuous phase may, indeed, not be a "trivial matter", but the present claims do not recite any measurement of how effective the dispersant functions.

Applicants have amended the independent claims to address this concern. As amended, the present claims clarify that the superabrasive particles are effectively dispersed by the dispersant.

In view of the amendments and Applicants' prior remarks, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-4 and 7-19 under 35 U.S.C. § 103.

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III. Conclusion

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested. The Examiner is invited to contact Applicants' undersigned representative with any questions concerning the present application.

Respectfully submitted,

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